

# UTILITY PATENT APPLICATION TRANSMITTAL (Small Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.  
70047-42-UT

Total Pages in this Submission  
4

## TO THE COMMISSIONER FOR PATENTS

Mail Stop Patent Application  
P.O. Box 1450

Alexandria, VA 22313-1450

Transmitted herewith for filing under 35 U.S.C. 111(a) and 37 C.F.R. 1.53(b) is a new utility patent application for an invention entitled:

**METHOD AND APPARATUS FOR IMAGING INTERNAL STRUCTURES OF TRANSPARENT AND TRANSLUCENT MATERIALS**

and invented by:

**DANIEL J. KANE    ANDREI B. VAKHTIN    and    KRISTEN A. PETERSON**

If a **CONTINUATION APPLICATION**, check appropriate box and supply the requisite information:

☐ Continuation    ☐ Divisional    ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Which is a:

☐ Continuation    ☐ Divisional    ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Which is a:

☐ Continuation    ☐ Divisional    ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Enclosed are:

### Application Elements

1. ☒ Filing fee as calculated and transmitted as described below
2. ☒ Specification having 36 pages and including the following:
  - a. ☒ Descriptive Title of the Invention
  - b. ☒ Cross References to Related Applications (if applicable)
  - c. ☒ Statement Regarding Federally-sponsored Research/Development (if applicable)
  - d. ☐ Reference to Sequence Listing, a Table, or a Computer Program Listing Appendix
  - e. ☒ Background of the Invention
  - f. ☒ Brief Summary of the Invention
  - g. ☒ Brief Description of the Drawings (if filed)
  - h. ☒ Detailed Description
  - i. ☒ Claim(s) as Classified Below
  - j. ☒ Abstract of the Disclosure



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**(Small Entity)**

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**Application Elements (Continued)**

3. ☒ Drawing(s) *(when necessary as prescribed by 35 USC 113)*
- a. ☐ Formal      Number of Sheets \_\_\_\_\_
- b. ☒ Informal      Number of Sheets      9
4. ☒ Oath or Declaration
- a. ☐ Newly executed *(original or copy)*      ☒ Unexecuted
- b. ☐ Copy from a prior application (37 CFR 1.63(d)) *(for continuation/divisional application only)*
- c. ☒ With Power of Attorney      ☐ Without Power of Attorney
- d. ☐ DELETION OF INVENTOR(S)  
Signed statement attached deleting inventor(s) named in the prior application,  
see 37 C.F.R. 1.63(d)(2) and 1.33(b).
5. ☐ Incorporation By Reference *(usable if Box 4b is checked)*  
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under  
Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby  
incorporated by reference therein.
6. ☐ CD ROM or CD-R in duplicate, large table or Computer Program (Appendix)
7. ☒ Application Data Sheet (See 37 CFR 1.76)
8. ☐ Nucleotide and/or Amino Acid Sequence Submission *(if applicable, all must be included)*
- a. ☐ Computer Readable Form (CFR)
- b. ☐ Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
- ii. ☐ Paper
- c. ☐ Statement(s) Verifying Identical Paper and Computer Readable Copy

**Accompanying Application Parts**

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(B) Statement (when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement/PTO-1449      ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
16. ☒ Certificate of Mailing
- ☐ First Class      ☒ Express Mail *(Specify Label No.):* EV342337392US



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**Accompanying Application Parts (Continued)**

17. ☒ Applicant claims small entity status. See 37 CFR 1.27.

☐ (Optional) Small Entity Statement(s) - Specify Number of Statements Submitted: \_\_\_\_\_

18. ☒ Additional Enclosures *(please identify below)*:

Associate Power of Attorney

**Request That Application Not Be Published Pursuant To 35 U.S.C. 122(b)(2)**

19. ☐ Pursuant to 35 U.S.C. 122(b)(2), Applicant hereby requests that this patent application not be published pursuant to 35 U.S.C. 122(b)(1). Applicant hereby certifies that the invention disclosed in this application has not and will not be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication of applications 18 months after filing of the application.

**Warning**

***An applicant who makes a request not to publish, but who subsequently files in a foreign country or under a multilateral international agreement specified in 35 U.S.C. 122(b)(2)(B)(i), must notify the Director of such filing not later than 45 days after the date of the filing of such foreign or international application. A failure of the applicant to provide such notice within the prescribed period shall result in the application being regarded as abandoned, unless it is shown to the satisfaction of the Director that the delay in submitting the notice was unintentional.***



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**(Small Entity)**

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**Fee Calculation and Transmittal**

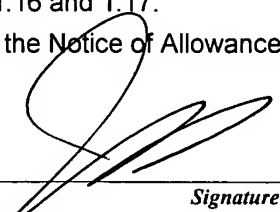
**CLAIMS AS FILED**

For	#Filed	#Allowed	#Extra	Rate	Fee
Total Claims	32	- 20 =	12	x \$9.00	\$108.00
Indep. Claims	5	- 3 =	2	x \$43.00	\$86.00
Multiple Dependent Claims (check if applicable) <input type="checkbox"/>					\$0.00
BASIC FEE					\$385.00
OTHER FEE (specify purpose) _____					\$0.00
TOTAL FILING FEE					\$579.00

- ☒ A check in the amount of \$579.00 to cover the filing fee is enclosed.
- ☒ The Director is hereby authorized to charge and credit Deposit Account No. 13-4213 as described below.
- ☐ Charge the amount of \_\_\_\_\_ as filing fee.
- ☒ Credit any overpayment.
- ☒ Charge any additional filing fees required under 37 C.F.R. 1.16 and 1.17.
- ☐ Charge the issue fee set in 37 C.F.R. 1.18 at the mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.311(b).

Dated: March 18, 2004

CUSTOMER NO. 005179  
cc:

  
Signature  
Jeffrey D. Myers, Reg. No. 35,964  
Peacock, Myers & Adams, P.C.  
P. O. Box 26927  
Albuquerque NM USA 87125-6927  
Telephone (505) 998-1502  
FAX (505) 243-2542



**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**

Applicant(s): Daniel J. Kane, Andrei B. Vakhtin, Kristen A. Peterson

Docket No.

70047-42-UT

Serial No.

Filing Date

Herewith (March 18, 2004)

Examiner

Group Art Unit

Invention:

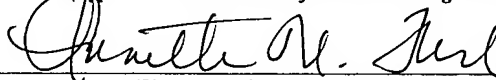
**METHOD AND APPARATUS FOR IMAGING INTERNAL STRUCTURES OF  
TRANSPARENT AND TRANSLUCENT MATERIALS**

I hereby certify that the following correspondence:

Utility Patent Application Transmittal with papers listed therein and \$ 579

*(Identify type of correspondence)*

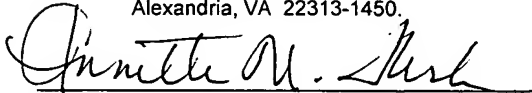
is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

March 18, 2004*(Date)*Annette M. Turk, Paralegal*(Typed or Printed Name of Person Mailing Correspondence)**(Signature of Person Mailing Correspondence)*EV342337392US*("Express Mail" Mailing Label Number)***Note: Each paper must have its own certificate of mailing.**



PATENT APPLICATION

I hereby certify that this transmittal and the documents referred to as enclosed therein are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 via Label No. EV342337392US, on March 18, 2004, addressed to:  
MAIL STOP: Patent Applications  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450.

  
Annette M. Turk, Paralegal

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. :  
Applicant : Daniel J. KANE , et al.  
Filed : Herewith (March 18, 2004)  
Title : METHOD AND APPARATUS FOR IMAGING INTERNAL STRUCTURES OF TRANSPARENT AND TRANSLUCENT MATERIALS  
Docket No. : 70047-42-UT

**Mail Stop: Patent Applications**

Commissioner for Patents  
United States Patent and Trademark Office  
PO Box 1450  
Alexandria, Virginia 22313-1450

ASSOCIATE POWER OF ATTORNEY


Dear Sir:

Jeffrey D. Myers, a principal attorney in the above-identified application for Letters Patent, hereby appoints as associate attorneys with full power:

Deborah A. Peacock, Reg. No. 31,649  
Paul Adams, Reg. No. 21,096  
Rod D. Baker, Reg. No. 35,434 and  
Stephen A. Slusher, Reg. No. 43,924 and  
Vidal A. Oaxaca, Reg. No. 44,267.

Respectfully submitted,

Date: March 18, 2004

  
Jeffrey D. Myers, Reg. No. 35,964  
Direct line: (505) 998-1502

Attorney for Applicant(s)  
PEACOCK, MYERS & ADAMS, P.C.  
P.O. Box 26927  
Albuquerque, New Mexico 87125-6927  
Telephone: (505) 998-1500  
Facsimile No. (505) 243-2542  
**Customer No. 005179**